GORODYSKIY, A.V.

Ultimate overstresses in the course of electrochemical reactions. Ukr.khim zhur. 31 no. 12:1263-1267 '65
(MIRA 19:1)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.
Submitted June 15, 1965.

SOV/120-59-5-33/46

AUTHORS: Gorodyskiy, V.A., Romanov, Yu.F., Sorokina, A.V. and Yakunin, M.I.

TITLE: Electro-capillary Method for the Preparation of Thin Layers of Radioactive Substances on Organic Films

PERIODICAL: Pribory i tekhnika eksperimenta, 1959, Nr 5, pp 128 - 130 (USSR)

ABSTRACT: The method is based on the deposition of the substance on pure and metallised organic films by spraying the solution from the end of a capillary tube under the action of an electrical field. The system is shown schematically in Figure 1, in which 1 is an aluminium ring carrying a colloidal film (1-2 $\mu g/cm^2$) covered with a thin layer of silver (about 3 $\mu g/cm^2$) and in contact with the ring. The silver layer is in electrical contact with the ring to which a negative potential is applied. The end of the capillary tube, whose diameter is 0.1 - 0.3 mm, is at about 1 - 2 cm above the film. At the top, the capillary is wider (1 mm diameter). A thin

Card1/3

Electro-capillary Method for the Preparation of Thin Layers of Radioactive Substances on Organic Films

platinum wire 5 , 0.05 mm in diameter, is let through almost to the end of the capillary tube. The experiment showed that the capillary must be very uniform and the end of the platinum wire carefully prepared. The wire is at a positive potential. In order to deposit a substance of a pure organic film, the modified installation shown in Figure 2 was used. In this figure, 1 is a glass container, 1' is a metallic electrode, 2 is the capillary, 2' is the wire, 2" is the solution to be deposited, 3 is a glass plate, 4 is a plexiglass ring and 5 is a holder. The ring with the colloidal film is on the surface of the conducting liquid in the vessel 1. Using this apparatus, films may be obtained such that the thickness differs by 20% between the centre and the outer edges. Figure 3 shows α-particle tracks obtained in an emulsion placed in contact with some typical radioactive sources obtained in the above manner.

SOV/120-59-5-33/46

Electro-capillary Method for the Preparation of Thin Layers of Radioactive Substances on Organic Films

Acknowledgments are made to K.A. Petrzhak.
There are 3 figures and 1 English reference.

ASSOCIATION: Radiyevyy institut AN SSSR (Radium Institute of the Ac.Sc., USSR)

SUBMITTED: August 6, 1958

Card 3/3

GORODYSKIY, V.A.

PHASE I BOOK EXPLOITATION SOV/6333

Bochkarev, V. V., ed.

Tekhnika izmereniye radioaktivnykh preparatov; sbornik statey (Techniques for the Measurement of Radioactive Preparations; Collection of Articles) Moscow, Gosatomizdat, 1962. 4600 copies printed.

Eds.: A. M. Smirnova and M. A. Smirnov; Tech. Ed.: S. M. Popova.

PURPOSE: This book is intended for specialists in nuclear instrumentation.

COVERAGE: The book is a collection of articles on recent developments in 1) measurement of the activity and 2) analysis of the composition of emissions of radioactive preparations. The methodology and apparatus used in these studies are described in detail. References are given at the end of each article.

TABLE OF CONTENTS:

Card 1/5

GORODYSKIY, V.I.; VESELAYA, I.V.

Copper, zinc, and cadmium content of the organs of rabbits with malignant tumors. Vop.med.khim. 6 no.2:128-130 Mr-Ap '60. (MIRA 14:5)

1. Research Institute for Radiology and Oncology, Kiev.
(COPPER IN THE BODY) (ZINC IN THEBODY)
(CADMIUM IN THE BODY) (CANCER)

SIZENKO, S.P.; GORODYSKIY, V.I.; VESELAYA I.V.; KIRILLOVA, V.S.

Study of the antiblastic properties of polythionates. Uch. zap. KRROI 7:192-197'61. (MIRA 16:8)
(CYTOTOXIC DRUGS) (THIONATES—THERAPEUTIC USE)

GORODYSKIY, V.I.; VESELAYA, I.V.

Amount of 3,4-benzopyrene in dust deposits and snow samples in Kiev. Gig. i san. 26 no.8:99-100 Ag '61. (MIRA 15:4)

1. Iz Kiyevskogo nauchno-issledovatel'skogo rentgeno-radiologicheskogo i onkologicheskogo instituta.
(KIEV--AIR POLLUTION) (BENZOPYRENE)

SHEVCHENKO, Ivan Feodosiyevich, zasl. deyat. nauki prof.; GORODYSKIY, Vladimir Ivanovich, dots.; YUNDA, I.F., red.

[Polarography in medicine and biology] Poliarografiia v meditsine i biologii. Kiev, Gosmedizdat USSR, 1964. 133 p. (MIRA 17:5)

Gorodysskiy, A. V.

USSR/Physical Chemistry - Electrochemistry, B-12

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 518

Author: Kudra, O. K., and Gorodysskiy, A. V.

Institution: Kiev Polytechnical Institute

Title: Method for Investigating the Electrodeposition and Galvanic Corrosion of Cadmium

Original Periodical: Izv. Kievsk. politekhn. in-ta, 1956, Vol 17, 179-190

Abstract: In an effort to determine the possible relationship between the quality of electroplating and the current density (i) used in its deposition, the preservation of the potential of Cd deposited on Pt, Ag, Cu, and Fe from a 0.1 N solution of $CdSO_4$ has been investigated as a function of the i used in the deposition. The method consisted in establishing the time required dor the solution of a given weight of Cd, which was determined from the jump in the potential of the electrode. It is shown that the higher the i used in the deposition of a layer of Cd on a foreign surface, the longer the time during which

Card 1/2

USSR/Physical Chemistry - Electrochemistry, B-12

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 518

Abstract: the Cd potential is maintained for the same amount of deposit. This, in the opinion of the authors, is due to the greater compactness of the deposited metal. The opinion is expressed that the new method can be developed and applied to the investigation of electrode and corrosion processes by studying the time during which the potential of the cover metal is maintained.

Card 2/2

FOLDI, E.;GERLEI, F.;GOROG, G.

Case of human glanders and significance of its diagnosis from the viewpoint of veterinary medicine. Orv. hetil. 94 no.12:328-331 22 Mar 1953. (CIML 24:4)

1. Doctors. 2. Surgical Department (Head Physician -- Dr. Gyorgy Gorog) and Central Laboratory and Prosectorium (Head Physician -- Dr. Ferenc Gerlei of Nyiregyhazai County Hospital (Director -- Dr. Bela Zempleni) and Executive Committee Hygiene Section of Nyiregyhazi District Council (Head -- Dr. Emil Foldi).

GOROG, Gyorgy, dr.

Retropubic prostatectomy in general surgery. Magy. sebeszet 7 no.3:210-216 June 54.

1. Szabolcs-Szatmar megyei Tanacs korhaza (Igazgato: Zempleni Bela dr.) Sebeszeti osztalyanak (foorvosa: Gorog, Gyorgy dr.) koslemenye.

(PROSTATE, surg.
retropubic)

GOROG, Imre

Land utilization arrangement and land registration on the Gyor-Sopron County collective farms. Good kart 16 no.4:275-284 '64.

L 35947-66

ACC NR: AP6027410 SOURCE CODE: HU/0017/66/000/002/0135/0139

AUTHOR: Gorog, Imre

19

8

ORG: none

12

TITLE: Role of industrial maps in the supervision of plantations

SOURCE: Geodezia es kartografia, no. 2, 1966, 135-139

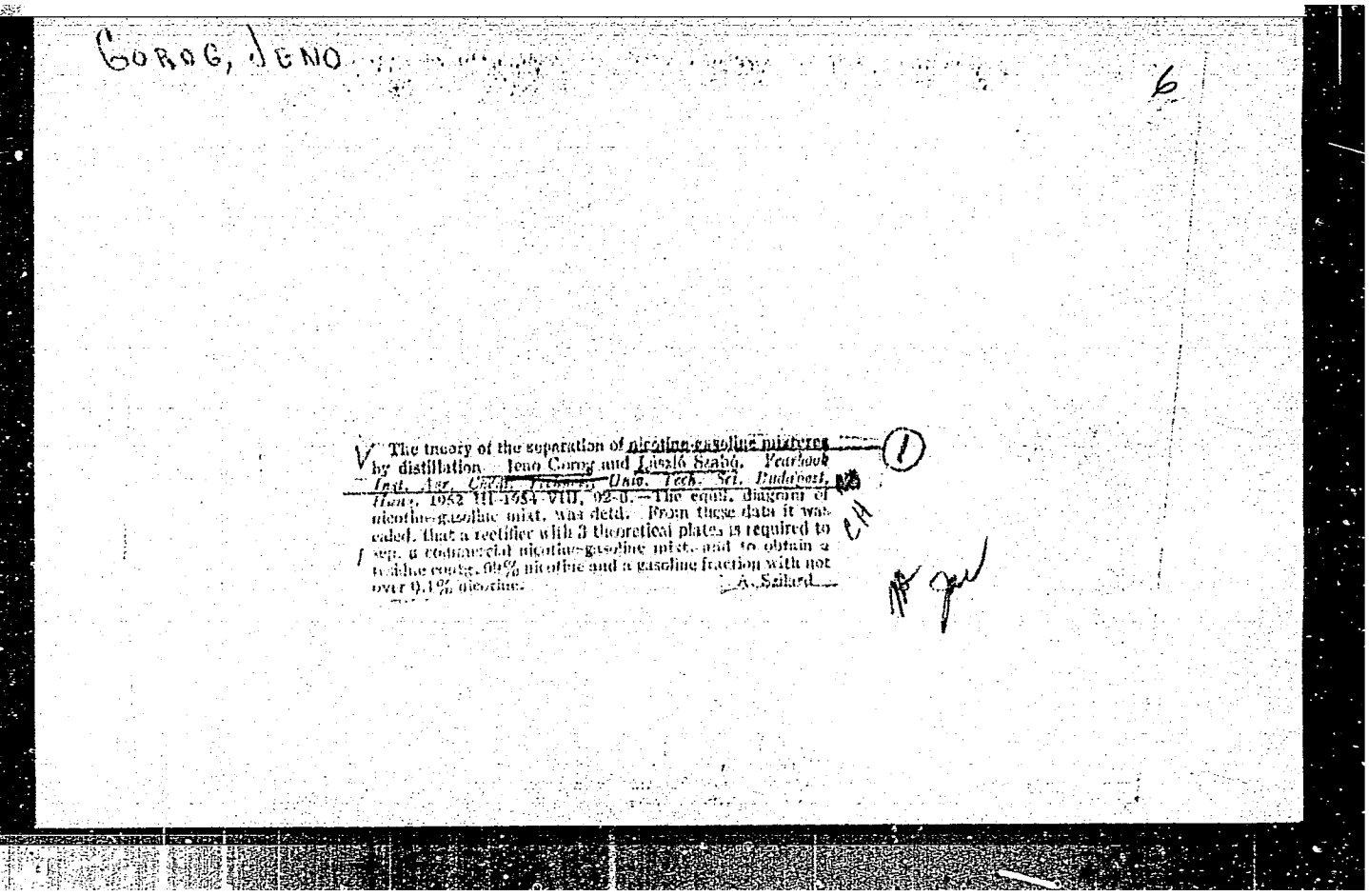
TOPIC TAGS: map, industrial organization, agronomy

ABSTRACT: A review was made of the systems of industrial maps, with especial emphasis on the data obtainable from these for the purposes of plantation supervision. It was shown that such maps are essential for proper supervision. The significance of industrial maps in the organization of plant growing operations on a differential basis was reviewed and the requirements for good industrial maps were outlined. It was advocated to extend the preparation of industrial maps to all cooperatives. [JPRS: 36,457]

SUB CODE: 08, 06, 05 / SUBM DATE: none

ns

Card 1/1 UDC: 912.63



GOROG, I ENO

6

V The theory of the separation of nicotine-gasoline mixtures by distillation. Jeno Gorog and László Szabó. *Yearbook Inst. Ind. Org. Chem. Technol. Univ. Tech. Sci. Budapest, Hung.*, 1952 III-1954 VIII, 92-9.—The equil. diagram of nicotine-gasoline mixt. was detd. From these data it was calcd. that a rectifier with 3 theoretical plates is required to sep. a commercial nicotine-gasoline mixt. and to obtain a middle runs, 99% nicotine and a gasoline fraction with not over 0.1% nicotine. A. Szilard

(1)

GOROG, JENO

Microbial reduction of organic compounds during yeast fermentation. Jenő Gorog and András Tsuk. *Yearbook Inst. Agr. Chem. Technol., Univ. Tech. Sci. Budapest, Hung.* 1952 III–1954 VIII, 97–113.—The factors affecting the reduction of *p*-nitrobenzaldehyde (I) during yeast fermentation were investigated. Two series of tests were conducted. In the first 200 g. sugar, 200 g. yeast, and 2 l. tap water were placed in a 5-l. flask. After the start of the fermentation 5 g. of I dissolved in 100 cc. EtOH was added. This addn. owing to the high EtOH concn. stopped the fermentation and 1 l. water had to be added to start it again. In this series the concn. of I was 1.6 g./l. In a second series 5 g. of I dissolved in 100 cc. hot EtOH was added. This did not stop fermentation and no addnl. water was needed. In this series the concn. of I was 2.3 g./l. The progress of the reduction of the nitro (II) and aldehyde (III) groups were followed by polarography, up to 22 hrs. The reduction of II and III occurred independently of each other. Most of the reduction was completed in the first hr. In the reaction I was reduced to 43% *p*-nitrobenzyl alc., 35% *p*-aminobenzyl alc., and a small amt. of *p*-aminobenzaldehyde. Acyloin condensation with acetyl-*p*-nitrophenylcarbinol as the end product occurred in very small amts. For this reaction pure enzymes were needed as shown by Smith and Hendlin (cf. *C.A.* 47, 6496i). J. A. Szilard

CH

(1)

GORO G., JENO

The microbial deterioration of soaps. (Preliminary publication). János Holló and Jenő Gorog. *Yearbook Inst. Agr. Chem. Technol., Univ. Tech. Sci. Budapest, Hung.* 1952 III–1954 VIII, 181–3.—Dark-brown and black stains observed on soaps after unusually hot and humid weather were traced to microorganisms, which can be grown on a soap-glue medium. They are spherical-shaped aerobic bacteria thriving well on air at 90% relative humidity but are adversely affected by light. The discoloration is inhibited by S-contg. compds. as 0.1% Na dithionite or 0.2% $Na_2S_2O_3$. The discoloration was observed only on soaps made with fats and oils contg. traces of Fe. J. A. Szilard

CH

GOROG, JENO

New methods for the preparation of morphine. (Preliminary publication). Jeno Gorog. *Yearbook Inst. Agr. Chem. Technol., Univ. Tech. Sci. Budapest, Hung.* 1952 III-1954 VIII, 206-8.—To increase the yield of morphine obtained by extn. methods from poppy chaff, hot instead of cold or lukewarm water was tried. Hot water dissolves nonalkaloids requiring changes in the extn. process. Expts. were conducted in the clarification of the ext. Results indicate that adsorption methods with active C are more efficient. J. A. Stillard

GOROG, Jeno

Role of antibiotics in the food industry. Elelm ipar 12 no.6/7: 181-185 Je-Jl '58.

1. Muszaki Egyetem Mezogazdasagi Technologiai Tanszek.

GOROG, J.

Chemical and biological theory of bastfiber retting. p. 155.

MAGYAR TEXTILTECHNIKA. (Textilipari Muszaki es Tudomanyos Egyesulet)
Budapest, Hungary. Vol. 11, no. 4, Apr. 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no.2, July 1959.
Uncl.

GOROG, Jeno

Subjective evaluation of the grade of steeping. Magy textil 17 no.1:16-18 Ja '65.

Gorog, Laszlo

✓ 7.5-11 551.582.1(439.1) 63:91

Górog, László, **Magyarország mezőgazdasági** földrajza. [Agricultural geography of Hungary.] Budapest, Tervgazdasági Könyvkiadó, 1954. 179 p. tables, 71 maps and graphs in pocket, 20 refs. DLC—A chapter on climate (p. 54-68) contains a general description of the climate of Hungary, discussion of the climatic requirements of the principal crops grown in Hungary and a climatic classification of the different regions of Hungary from the point of view of these crops. The appended maps include agroclimatic information such as amounts and probabilities of rainfall, accumulated temperature, sunshine, date of last frost, and climatic regions in Hungary, based on data covering 30 to 40 years (Append. 5-10). Of particular interest are the maps (Append. 64-71) showing suitability for growing wheat, corn and potatoes, on the basis of rainfall probability during the growing season, temperature and soil condi

Subject Headings: 1. Climate of Hungary 2. Agricultural geography 3. Hungary.—*G.T.*

GP

GOROG, L.

New drug for more effective protection against grapevine Peronospora. p. 190. KOZLEMENYEI, Budapest. Vol 8, no. 1/2, 1955

SOURCE: EEAL, Vol 5, no. 7, July 1956.

Görög, Lászlóné

CW4

HUNG.

8600* New Organic Phosphorous Compounds as *Insecticides*. Újabb foszfortartalmú szerves vegyületek, mint inszekticidek. I.. Mixed Anhydrides. Vegyes anhidridek. II. Production and Effect of S-(2-Acet-1-2-Carboethoxy)-Alkyl-O,O-Dimethyl-Dithio Phosphoric Acids and Their Derivatives. S-(2-acetil-2-karboetoxi)-alkil-O,O-dimetil-ditiofoszforsavak és származékaik előállítása és inszektícid hatása. (Hungarian.) Károly Szabó, György Matolcsy, and Lászlóné Görög. *Magyar Kémiai Folyóirat*, v. 61, no. 3, Mar. 1955, p. 80-89. Includes tables, structural formulas. 19 ref.

GOROG, Laszlone

HUNGARY/Chemical Technology. Chemical Products and Their Application - Pesticides I-7

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 12445

Author : Szabo Karoly, Gorog Laszlone, Hamran Jozsefne
Title : Synthesis and Herbicidal Action of Ammonium- and Substituted Ammonium Salts of Aryl Dithiocarbamic Acids

Orig Pub : Arilditiokarbaminsavas ammonium-es szubsztitualt ammoniumsok eloallitasa es herbicid hatasa. Novenytermeles, 1956, 5, No 2, 185-192 (Hungarian; Russian and English summaries)

Abstract : Salts of the general formula p-$XC_6H_4NHC(S)SY$ are prepared by interaction of aniline, or p-chloraniline, with CS_2 and NH_4OH or amines. Listed are the constants of the substances thus obtained (X, Y, MP.): H, NH_4, 107° (I); H, $NH_2(CH_3)_2$, 105-110°; H, $NH(CH_3)_3$, 145-150°; H, $NH_2(C_2H_5)_2$, 145-150° (II); H, $NH_3C_3H_7$-iso, 115-120°; H, $NH_3C_6H_{11}$, 205-210°; Cl, NH_4, 150-165° (III); Cl,

Card 1/2 - 52 -

GOROG, L.

HUNGARY/Cultivated Plants - General Problems. M-1

Abs Jour : Ref Zhur - Biol., No 9, 1958, 39147

Author : Gorog, L.
Inst : -
Title : The Development of Agriculture in Hungary (1895-1954)

Orig Pub : Agrartudomany, 1957, 9, No 3, 6-10.

Abstract : A survey of the development of agriculture from 1895 up to 1935 is given in this paper.
The state of agriculture at the end of the last century, during the period of the first world war and in the period of the economic crises (1930) are characterized at length. Statistical data on the relation between the distribution of the land (forest, meadows, arable soil, etc.) and individual crops in various years, as well as the average yield of some crops are given in tables. -- F.Yu. Grabar'.

Card 1/1

GOROG, M.

"Bubble gas originating from slag inclusions" by A.D. Morgan. Reviewed by M. Gorog. Koh lap:Suppl.:Ontode 14 no.8:191-192 Ag '63.

GOROG, N.

GOROG, N. Was it correct for a factory of photographic chemicals to establish a cement works? (-a-n). Industrial management in Yugoslavia. p. 30. The Automobile Club of the People's Republic of Hungary. p. 32.

Vol. 11, no. 15, Aug. 1956
MUSZAKI ELET
TECHNOLOGY
Budapest, Hungary

So: East European Accession, Vol. 6, No. 5, May 1957

FEKETE, Gyorgy (Budapest X., Cserkesz u.63); GOROG, Peter (Budapest X., Cserkesz u.63); NURIDSANY, Janos (Budapest X., Cserkesz u.63)

Further data concerning the ACTH-protamine antagonism. Acta physiol Hung 20 no.2:197-206 '61.

1. Pharmacological Laboratory, Chemical Works of G. Richter LTD.

FEKETE, G.; GOROG, P.

The influence of simultaneously applied anabolic steroids on adrenal hypofunction due to corticosteroids. Acta med. Hung. 18 no.3:345-348 '62.

1. Chemical Works of Gedeon Richter Ltd. Pharmacological Laboratories, Budapest.

(ANDROGENS) (ADRENAL CORTEX HYPOFUNCTION)
(CORTISONE)

FEKETE, G.; GOROG, P.

Reactivity of the adrenals after various prolonged influences. II. Investigation with Sayers' method. Acta physiol. akad. sci. hung. 21 no.1: 83-86 '62.

1. Department of Pharmacology, Chemical Works of Gedeon Richter Ltd., Budapest.

(ADRENAL GLAND physiology)

GOROG, P.; SZPORNY, L.

The effect of compounds inhibiting carbohydrate metabolism on the dextran anaphylactoid inflammation. Acta physiol. acad. sci. Hung. 26 no.3:263-267 '65

1. Pharmacological laboratory, Richter Gedeon Chemical Works, Ltd. Budapest.

L 43019-66 RC
ACC NR: AT6031829 SOURCE CODE: HU/2505/65/026/003/0263/0267

23
B+1

AUTHOR: Gorog, Peter--Gereg, P.; Szporny, Laszlo--Sporni, L.

ORG: Pharmacological Laboratory, Richter Gedeon Chemical Works, Budapest (Kobanyai Gyogyszerarugyar, Pharmakologiai Laboratorium)

22

TITLE: Effect of compounds which inhibit carbohydrate metabolism on dextran anaphylactoid inflammation

SOURCE: Academia scientiarum hungaricae. Acta physiologica, v. 26, no. 3, 1965, 263-267

TOPIC TAGS: biologic metabolism, carbohydrate, polysaccharide, maleic acid, fumaric acid, fluoride, arsenate, poison effect, hormone

ABSTRACT: The effect of certain compounds known to block glucose metabolism on dextran anaphylactoid inflammation has been investigated. Malonic acid, maleic acid, arsenate and fluoride inhibited the development of dextran edema greatly when administered in non-toxic doses. The inhibitory effect of malonic acid could be suspended with fumaric acid and succinic acid. These metabolic poisons block intensively the edema-enhancing action of insulin. The potential role played by the inhibition of glucose metabolism, in the antiphlogistic effect, is discussed. Orig. art. has: 3 tables. [Orig. art. in Eng.] [JPRS]

SUB CODE: 06 / SUBM DATE: 09Aug63 / OTH REF: 011

Card 1/1 MLP

0919 0579

Distr: 4E2c(j)

Determination of complex stability constant from catalyst activity. I. Stability constant of iron(III)-triethylenetetramine (TETA) complex. M. T. Beck and S. Gorog (Univ. Szeged, Hung.). *Acta Univ. Szegediensis, Acta Phys. et Chem.* [N.S.], 4, 60–65(1958)(in English).—Since the catalytic effect of Fe(III)TETA on the decompn. of H_2O_2 is inhibited by ethylenediaminetetraacetic acid (EDTA), because of the formation of Fe(EDTA), which has no catalytic activity, K = [Fe(III)TETA]/[[Fe(III)]-[TETA]] could be calcd. from the extent of the inhibition and known values of the stability const. of Fe(III)EDTA and the acid dissocn. consts. of TETA and EDTA. The av. value for K from 2 series of kinetic measurements at initial concns. of TETA of 5×10^{-4} and 10^{-3} mole/l., pH 10, was 8.8×10^{25}. K was also calcd. from the increased soly. of $Fe(OH)_3$ in the presence of TETA owing to formation of Fe(III)TETA, and values of 26.8×10^{25} and 25.3×10^{25} were obtained.

E. M. Vanags

GOROG, S.

SCIENCE

PERIODICALS: ~~ACTA ZOOLOGICA~~. Vol. 64, No. 7/8 July/Aug. 1958
MAGYAR KEMIAI FOLYOIRAT

Gorog, S. Formation of complex compounds in redox processes. p. 272

Monthly list of East European Accessions (EEAI) LC, Vol. 8, No. 2, February 1959, Unclass.

Distr: 4E2c

Titrimetric determination of small amounts of cobalt with an equivalent ratio of 1:37. L. Bartha and S. Görög (Univ. Szeged, Hung.). *Talanta* 1, 310-13(1958). S.c. C.A. 52, 11055c. Belle L. Rosenblatt

HUNGARY / Physical Chemistry. Kinetics. Combustion. B
Explosions. Topochemistry. Catalysis.

Abs Jour: Ref Zhur-Khimiya, No 20, 1959, 70769.

Author : Beck, M.; Gorog. S.
Inst : Not given.
Title : The Kinetic Study of the System Fe(3+) - Triethylenetetramine - H_2O_2.

Orig Pub: Magyar kem. folyoirat, 1958, 64, No 11, 432-436.

Abstract: Decomposition of H_2O_2, which had been catalyzed by the complex group Fe(3+) - triethylene-tetramine, was analyzed. The oxidation of H_2O_2 triethylenetetramine takes place simultaneously with with the catalytic decomposition of H_2O_2, and this reaction is also catalyzed by the complex Fe(3+) - triethylenetetramine. The authors re-

Card 1/2

HUNGARY / Physical Chemistry. Kinetics. Combustion. B
Explosions. Topochemistry. Catalysis.

Abs Jour: Ref Zhur-Khimiya, No 20, 1959, 70769.

Abstract: pudiate the catalysis mechanism proposed by Bang (RZhKhim, 1956, No. 22, 2087). -- From the authors' summary.

Card 2/2

BECK, Mihaly, a kemiai tudomanyok kandidatusa; (Szeged); GOROG, Sandor (Szeged)

Amphoteric characteristic of ethylenediaminetetraacetic acid and its effect on the stability of its metal complexes. Kem.tud.kozl. MTA 12 no.3:264-277 '59. (KMAI 9:4)

1. Szegedi Tudomanyegyetem Szervetlen es Analitikai Kemiai Intezete.
(Ethylenedinitrilotetraacetic acid) (Metals)
(Complex compounds)

Go Rog JS.

Protonation of complexes. M. T. Beck and S. Gorog (Univ. Szeged, Hung.). *J. Inorg. & Nuclear Chem.* 12, 353–5(1960).—Fe(III)–ethylenediaminetetraacetic acid and -1,2-diaminecyclohexanetetraacetic acid systems were studied for complex/free central ion concn. ratio to det. by acid effect the stability consts. $K_{H_i-_j}$, resp., 1.68×10^{16}, 1.80×10^{15}, 6.26×10^{8}, and —, and 3×10^{27}, 1.0×10^{23}, 9.0×10^{19}, and 8.7×10^{7}. Jack J. Bulloff

GOROG, SANDOR

Kinetic study of the system Fe(III)-triethylenetetramine-H_2O_2. Mihály T. Beck and Sándor Gorog. *Acta Chim. Acad. Sci. Hung.* 20, 57-66(1960)(in English).—The limitations of the Fe(III)-triethylenetetramine complex as a model for the enzyme catalase (cf. Wang, *C.A.* 50, 4254f) are shown by a detailed study of the system Fe(III)-triethylenetetramine(I)-H_2O_2. I was oxidized by H_2O_2, and this reaction was catalyzed by Fe(III). $Fe(OH)_3$ also was found to catalyze the decompn. of H_2O_2, and a very active form of $Fe(OH)_3$ was formed in the presence of I. For fixed concns. of I and H_2O_2 the rate of Fe(III)-catalyzed decompn. of H_2O_2 reached a satn. value. This satn. value varied with the concn. of Fe(III). For I = 10^{-2} mole/l. and H_2O_2 = 10^{-1} mole/l. a max. satn. value was found for Fe(III) ≈ 1×10^{-5} mole/l. A mechanism based on the peculiarly suitable electronic distribution of the complex is proposed to replace the steric mechanism of Wang (*loc. cit.*). Mark M. Jones

4E 20(j) J-8 (WB)

3

BECK, Mihaly; GOROG, Sandor

Determination of complex stability constant on the basis of catalytic activity. Pt. 1. Magy kem folyoir 65 no.2:55-58 F '59.

1. Szegedi Tudomanyegyetem Szervetlen es Analitikai Kemiai Intezete.

GOROG, S. & BECK, M.

Determination of the complex stability constant on the basis of catalytic activity. I. The stability constant of iron (III)-triethylenetetramine complex. p.52

MAGYAR KEMIAI FOLYOIRAT. Budapest, Hungary. Vol. 65, no. 2, Feb. 1959

Monthly List of East European Accessions (EEAI), LC. Vol. 8, No. 9, September 1959
Uncl.

GOROG, Sandor; BECK, Mihaly

Volumetric method for the ultramicrodetermination of iron by means of the 0,1 n $KMnO_4$ volumetric solution. Magy kem folyoir 65 no. [redacted] My '59.

1. Szegedi Tudomanyegyetem Szervetlen es Analitikai Kemiai Intezete.

BECK, Mihaly; GOROG, Sandor

Determination of stability constants of proponated metal chelates. Magy kem folyoir 65 no. 10:413 O '59.

1. Szegedi Tudomanyegyetem Szervetlen-es Analitikai-Kemiai Intezete.

GOROG, Sandor (Szeged, Beloiannisz ter 7); BECK, Mihaly T., dr. (Szeged, Beloiannisz ter 7)

Volumetric method for the microdetermination of iron with decinormal potassium permanganate solution. Acta chimica Hung 29 no.3:291-296 '61.

1. Institute of Inorganic and Analytical Chemistry, University of Szeged, Hungary.

(Volumetric analysis) (Iron) (Potassium) (Permanganates)

BECK, Mihaly T., dr. (Szeged, Beloiannisz ter 7, Hungary); GOROG, Sandor (Szeged, Beloiannisz ter 7, Hungary)

On the catalytic effect of oxygen-carrying complexes. Study of the system cobalt (II)-glycylglycine-ascorbic acid-oxygen. Acta chimica Hung 29 no.4:401-408 '61.

1. Institute of Inorganic and Analytical Chemistry, University of Szeged.

GOROG, Sandor

Solving some analytic problems in relation to the manufacture of 4-ethyl-pyridine. Magy kem lap 18 no.11:551-554 N '63.

1. Kobanyai Gyogyszerzrugyar.

BECK, Mihaly; GOROG, Sandor

Catalytic properties of oxygen carrier complexes. Magy kem folyoir 69 no.2:56-60 F '63.

1. Szegedi Tudomanyegyetem Szervetlen es Analitikai Kemiai Tanszeke, es Reakciokinetikai Akademiai Kutato Csoport.

BECK, Mihaly; GOROG, Sandor; KISS, Zoltan

Effect of ethylene-diamine-tetraacetic acid on hydrogen-perioxide-decomposition catalyzed with Fe(III). Magy kem folyoir 69 no.12:550-551 D'63.

1. Jozsef Attila Tudomanyegyetem Szervetlen- es Analitikai Kemiai Tanszeke, Szeged; Reakciokinetikai Akademiai Kutato Csoport.

GOROG, Sandor

Analysis of technical calcium malonate. Magy kem lap 19 no. 12: 675-676 D '64.

1. Kobanya Drug Factory, Budapest.

L 1186-66 EWT(m)/EPF(c)/EWP(j) WW/RM

ACCESSION NR: AT5025194 HU/2502/64/042/004/0321/0323

AUTHOR: Beck, Mihaly T. (Doctor)(Budapest); Gorog, Sandor (Doctor)(Budapest); Kiss, Zoltan (Szeged)

TITLE: Effect of ethylenediaminetetraacetate on the decomposition of hydrogen peroxide catalyzed by trivalent iron

SOURCE: Academia scientiarum hungaricae. Acta chimica, v. 42, no. 4, 1964, 321-323

TOPIC TAGS: amine, acetate, hydrogen peroxide, chemical decomposition, catalytic cracking, iron

Abstract: [English article] The fact that the catalytic effect of trivalent iron on the decomposition of hydrogen peroxide decreases by the addition of ethylenediaminetetraacetate is well known. It was found, however, that a rate increase is evident at low ethylenediaminetetraacetate concentrations. This was attributed to the intermediate formation of a binuclear complex which exhibits a double polarizing effect. The ethylenediaminetetraacetate concentration vs. decomposition reaction rate curves were presented and discussed. One reference to a Hungarian publication. Orig. art. has 2 graphs and 1 figure.

Card 1/2

L 1186-66
ACCESSION NR: AT5025194

44,55 6

ASSOCIATION: Institute of Inorganic and Analytical Chemistry, A. Jozsef University, Szeged; Reaction Kinetical Research Group of the Hungarian Academy of Sciences, Szeged

44,55

SUBMITTED: 09Sep64 ENCL: 00 SUB CODE: GC, GC

NO REF SOV: 000 OTHER: 001 JPRS

Card 2/2

GOROG, Sandor; EZER, Elemer

New method for the determination of betaine. Magy kem folyoir 70 no.3:97-99 Mr '64.

1. Applied Physicochemical Research Laboratory and Isotope Laboratory, Kobanya Drug Factory, Budapest.

GOROG, Sandor

Data on the analytic chemistry of steroid compounds. Pt.1.
Magy kem folyoir 70 no. 4:161-163 Ap '64.

1. Research Laboratory for Applied Physicochemistry of the Kobanya Drug Factory.

GOROG, Sandor

Data on the analysis of steroid compounds. Pt.2. Magy kem folyoir 70 no.9:414-416 S '64.

1. Applied Physicochemical Research Laboratory, Kobanya Drug Factory, Budapest.

GD

ACC NR: AP6008876 SOURCE CODE: HU/0005/65/071/005/0220/0222

AUTHOR: Gorog, Sandor; Tomcsanyi, Laszlo

ORG: Research Laboratory for Applied Physical Chemistry, Kobanya Pharmaceutical Works, Budapest (Kobanyai Gyogyszerarugyar, Alkalmazott Fizikai-Kemiai Kutatolaboratorium)

TITLE: Data on the analytical chemistry of compounds with a sterane skeleton. Part 3: Determination of steroids containing isolated ketone groups

SOURCE: Magyar kemiai folyoirat, v. 71, no. 5, 1965, 220-222

TOPIC TAGS: quantitative analysis, hydroxylamine, ketone

ABSTRACT: Quantitative determination of ketosteroids was achieved by determining alkalimetrically the excess hydroxylamine remaining after the sample has been transformed into hydroxylamine oxime. The results of the analysis are accurate to within ± 1.5% and acids of pK > 3 do not interfere. The analytical technique was described in detail and results for 15 determinations were presented. The authors thank Candidate I. Gyenes for the valuable discussions as well as Maria Kapas for carrying out the experimental work. Orig. art. has: 1 figure and 1 table. [JPRS]

SUB CODE: 07 / SUBM DATE: 26Sep64 / OTH REF: 013

Card 1/1

L 47523-66

ACC NR: AT6034999 SOURCE CODE: HU/2502/66/047/002/0121/0127

AUTHOR: Gorog, Sandor--Gereg, Sh., (Doctor), and Tomcsanyi, Laszlo--Tomcsani, L., of Gedeon Richter Chemical Works in Budapest.

ORG: none

TITLE: "Analysis of Steroids. Part 3: Determination of Steroids Containing Isolated Carbonyl Groups"

SOURCE: Budapest, Acta Chimica Academiae Scientiarum Hungaricae, Vol 47, No 2, 1966, pp 121-127.

TOPIC TAGS: organic oxine compound, hydroxylamine, quantitative analysis

Abstract: [English article] The method described for the determination of ketosteroids containing isolated carbonyl groups is based on the reaction of the steroid with hydroxylamine. The formation of oxime, in the reaction with 0.1 N hydroxylammonium salicylate, ceases and the excess hydroxylamine is back-titrated alkalimetrically using a mixture of dimethyl yellow and methylene blue as the indicator. The reaction is conducted using a 2:1 mixture of chloroform and methanol. The method is accurate to within ± 1.5%. Acids of pK > 3 do not interfere, but the technique is not suitable for ketosteroids where the carbonyl groups are conjugated with a double bond. Orig. art. has: 1 figure and 1 table. [JPRS: 36002]

SUB CODE: 07 / SUBM DATE: 04 Dec 64 / OTH REF: 013

Card 1/1 mt

0921 1572

5.4130

67839
S/153/59/002/06/007/029
B115/B000

~~5(4)~~

AUTHORS: Batsanov, S. S., Gorogotskaya, L. I.

TITLE: The Relation Between the Molecular Volumes and the Crystal-lattice Energies

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1959, Vol 2, Nr 6, pp 858 - 864 (USSR)

ABSTRACT: This paper is intended to establish precise physical fundamentals to the relations between the molecular volumes and the lattice energies. The whole complex of physico-chemical properties of the crystals is determined by this relation. The molecular volume of a substance is a cubic function of the interatomic distances $V = f(r^3)$. According to Coulomb's law the lattice energy of an ionic crystal can be expressed using the relation $U = \varphi(\frac{1}{r})$. In this paper, only crystalline compounds of mono- and bivalent elements with a maximum negative cation potential of 1.5 to 1.7, and a minimum anion potential of 2.5 were considered, since, for the other com-

Card 1/4

The Relation Between the Molecular Volumes and the Crystal-lattice Energies

pounds, the values calculated for the lattice energies are in disagreement with data found experimentally. Halides, oxides, sulfides, and some nitrogen-containing compounds of the alkaline, earth-alkaline, and some other mono- and bivalent cations with no inert-gas structures belong to the compounds investigated. As the volume depends only on constant geometrical factors, and the lattice energy is dependent on constant quantities as well, the product $\sqrt[3]{V}.U$ should remain, more or less constant for analogous compounds. This can be checked experimentally in a simple way. The molecular volumes of A^+X^--type salts and the numerical values of the products $\sqrt[3]{V}.U$ are given (Table 1). The same values are then given for $A^{2+}X^{2-}$-(Table 2), $A^{2+}X_2^-$-(Table 3), $A_2^+X^{2-}$-(Table 4) type salts, for hydroxides and hydrosulfides (Table 5), nitrogen-containing compounds (Table 6), and the carbonates of bivalent metals (Table 7). Results given in the tables show that the products $V^{\frac{1}{3}}.U$ = const are almost the same for

Card 2/4

analogous compounds (with a maximum deviation of 2%). The numerical differences of the products $V^{\frac{1}{3}} \cdot U$ = const for salts of different types in the tables is explained by the fact that the molecular volume depends on the number and the lattice energy on the number and the charge of the ions.

According to the average values given for $V^{\frac{1}{3}} \cdot U$, the product of the specific volumes and the lattice energies for salts of all types is constant: $V_1^{\frac{1}{3}} \cdot U_1$ = const = 220. This value can also be interpreted on the basis of the formula for the energies of ion crystals derived by Kapustinskiy

$$U = 256 \frac{\sum m z_1 \cdot z_2}{r_A + r_X} .$$

Lattice energies calculated from the known molecular volumes for a number of halides, sulfides, and oxides, not determined experimentally are given in table 8. In addition to the

The Relation Between the Molecular Volumes and the Crystal-lattice Energies

lattice energies, the densities of crystallic substances, i.e. of NaSH, NaCN, NH_4CN, and CsN_3 were calculated in some cases. From data obtained in the course of the investigation, the hydrogen-bond energies for NH_4F and NH_4N_3 could be calculated. I. I. Zaslavskiy (Refs 3-6) is mentioned by the authors. There are 8 tables and 23 references, 7 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M. V. Lomonosova, kafedra kristallografii i kristallokhimii (Moscow State University imeni M. V. Lomonosov, Chair of Crystallography and Crystallochemistry)

SUBMITTED: May 8, 1958

Card 4/4

RATSANOV, S.S.; GOROGOTSKAYA, L.I.

Manganese halogen selenides. Izv. Sib. otd. AN SSSR no.3:42-48 '59. (MIRA 12:8)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya Akademii nauk SSSR.

(Manganese compounds) (Selenium compounds)

5(2) SOV/78-4-1-13/48

AUTHORS: Batsanov, S. S., Gorogotskaya, L. I.

TITLE: Oxy-sulfides and Halogen Sulfides of Manganese (Oksi- i galogensul'fidy margantsa)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 1, pp 62-70 (USSR)

ABSTRACT: The synthesis of γ-MnOS and the γ halogen sulfides of manganese was carried out and confirmed by physico-chemical and X-ray analyses. The compound MnSBr, in which manganese is trivalent, was synthesized. The synthesis of MnSJ was carried out by the effect of iodine on the pink modification of manganese sulfide. The compound MnSJ is entirely soluble in water and organic solvents, constant in air and stable up to 150°C. This compound is clearly distinct from the manganese iodide compound. The reciprocal effect of halogens with manganese sulfide can be seen in two respects: above all, the halogen is accumulated but there is also a slight degree of displacement reactions of sulfur caused by the halogens. The synthesis of α-oxy-sulfides and halogen sulfides of manganese and the properties of the products formed are described. Roentgenograms of all compounds

Card 1/2

Oxy-sulfides and Halogen Sulfides of Manganese

and measurements of the refractometric constants of these compounds were recorded. There are 2 figures, 8 tables, and 16 references, 9 of which are Soviet.

SUBMITTED: October 2, 1957

BATSANOV, S.S.; GOROGOTSKAYA, L.I.

Ionic refraction of neodymium. Izv. Sib. otd. AN SSSR no.7: 111-114 '61. (MIRA 14:8)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR, Novosibirsk.
(Refractometry) (Neodymium)

BATSANOV, S.S.; GOROGOTSKAYA, L.I.; GRIGOR'YEVA, V.S.

Mixed manganese thiocyanates. Izv. SO AN SSSR no.3 Ser. khim. nauk no.1:38-47 '63. (MIRA 16:8)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR, Novosibirsk.

(Manganese salts) (Thiocyanates)

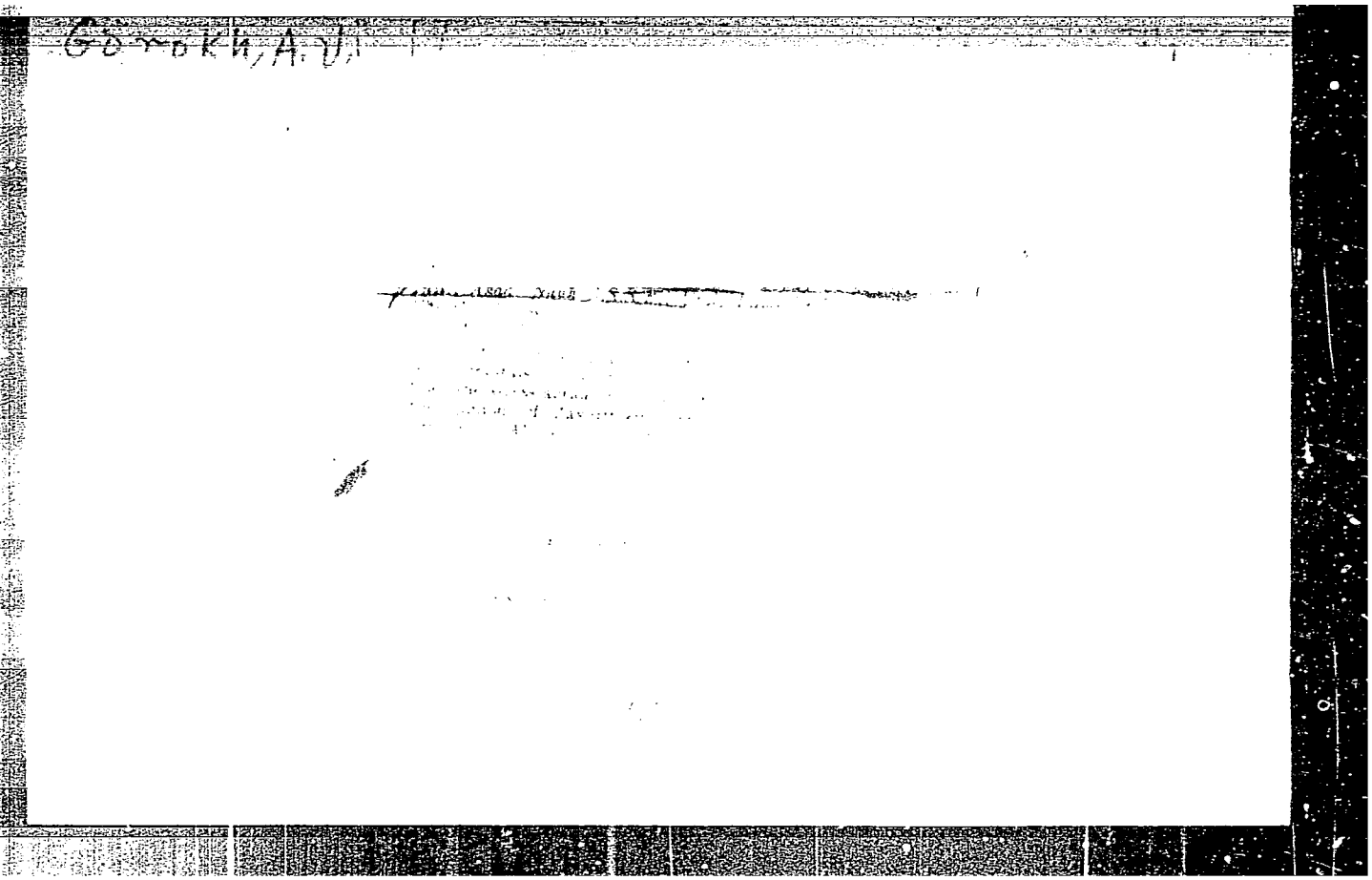
GOROGOTSKAYA, L.I.

Crystalline texture of syngenite $K_2Ca[SO_4]_2 \cdot H_2O$. Dokl. AN SSSR 157 no.6:1373-1375 Ag '64. (MIRA 17:9)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii AN SSSR. Predstavleno akademikom N.V. Belovym.

KADARMETOV, Kh.N. (Chelyabinsk); RUSAKOV, L.N. (Chelyabinsk); GOROKH, A.V. (Chelyabinsk)

Characteristics of the reduction of chromium ore lumps. Izv. AN SSSR. Met. i gor. delo no.4:17-23 Jl-Ag '64. (MIRA 17:9)



GOROKH, A.V.

Characteristics of pyrite deposits in the central Urals [with summary in English]. Sov. geol. no. 5:117-129 My '58. (MIRA 11:10)

1. Gornogeologicheskiy institut Ural'skogo filiala AN.
(Ural Mountains--Pyrites)

GOROKH, A.V.

New data on the geology and mineralogy of the Krasnogvardeyskiy pyrite deposit. Trudy Gor.-geol. inst. UFAN SSSR, no.34:21-39 '58. (MIRA 14:10)
(Krasnogvardeyskiy region (Ural Mountains))--Pyrites)

GOROKH, A. V., Cand of Geol-Min Sci -- (diss) "Geological Features of the Krasnogvardeysk Copper Pyrite Deposit in the Central Urals and Problems of its Genesis," Sverdlovsk, 1959, 15 pp (Mining and Geological Institute, Ural Branch of the Academy of Sciences USSR) (KL, 8-60, 115)

GORGE, A.V.

Metacolloid pyrite ores in the Krasnogvardeysk deposit (Central Urals). Trudy Gor.-geol. inst. UFAN SSSR no. 42:67-82 '59.
(MIRA 14:2)

(Ural Mountains--Pyrites)

GOROKH, A.V.

Hypogene gypsum from the Krasnogvardeyskiy pyrite region in the Urals. Trudy Gor.-geol. inst. UFAN SSSR no. 35:137-142 '60.
(MIRA 14:1)
(Krasnogvardeyskiy region (Ural Mountains)--Gypsum)

GALIMIN, I.M., kand.tekhn.nauk; GOROKH, A.V., kand.geol.-mineral.nauk

Skulls in blast furnace top and downtakes during the smelting of zinc-bearing iron ores. Stal' 21 no.12:1062-1064 D '61.
(MIRA 14:12)

1. Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii.
(Blast furnaces—Maintenance and repair)

GALEMIN, I.M.; GOROKH, A.V.

Mechanism of the disintegration of the carbon lining in blast furnace hearths and hearth bottoms. Ogneupory 28 no.9:407-412 '63. (MIRA 16:10)

1. Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii.

GALPERIN, I.M.; GOROKH, A.V.

Changes in multiple-grog firebrick during service in a blast furnace hearth. Ogneupory 29 no.6:258-263 '63. (MIRA 18:3)

1. Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii.

GOROKH, A.V. (Chelyabinsk); KOMLEV, G.A. (Chelyabinsk)

A hypothesis on the disintegration of refractories in blast furnaces.
Izv. AN SSSR. Met. i gor. delo no.5:16-17 S-O '64.
(MIRA 18:1)

GALEMIN, I.M.; GOROKH, A.V.

Effect of zinc on the surface of refractory linings of blast furnace stacks. Izv. vys. ucheb. zav.; chern. met. 7 no.11: 41-49 '64. (MIRA 17:12)

1. Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii.

GALEMIN, I.M.; GOROKH, A.V.

Sinter reduction and slag formation at various levels of a blast furnace. Izv. vys. ucheb. zav.; chern. met. 7 no.12:24-32 '64
(MIRA 18:1)

1. Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii.

GOROKH, A.V.; GALEMIN, I.M.; KOMLEV, G.A.

Behavior of zinc in a blast furnace and its effect on the refractory lining of the stack. Stal' 24 no.7:587-591 Jl '64.
(MIRA 18:1)

1. Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii.

ACCESSION NR: AP4038522 S/0020/64/156/003/0541/0542

AUTHOR: Gorokh, A. V.; Rusakov, L. N.; Savinskaya, A. A.

TITLE: Synthesis and characteristics of molybdenum sesquisulfide (MO sub 2 S sub 3)

SOURCE: AN SSSR. Doklady*, v. 156, no. 3, 1964, 541-542, and insert facing p. 542

TOPIC TAGS: molybdenum sesquisulfide, synthesis, physical property, lattice parameter, molybdenum, sulfur, hardness, optical property

ABSTRACT: On the basis of chemical analysis the formula Mo_2S_3 is assigned to the intermediate product of thermal dissociation of molybdenite. Up to the present time this compound was not characterized optically or by x-ray diffraction. Consequently, it was the purpose of this work to synthesize molybdenum sesquisulfide and to determine some of its physical constants. Molybdenum powder (99.9%) and sulfur were used as starting materials in a 2:3 ratio. The samples were thoroughly mixed and sealed in quartz ampules under vacuum. This mixture was then heated resulting in formation of Mo_2S_3. This article describes determinations of hardness, optical properties, and crystal lattice properties of molybdenum sulfides. It was conclusively shown that molybdenum sulfides lower than Mo_2S_3 are not formed. Orig.

Card 1/2

ACCESSION NR: AP4038522

art. has: 1 table and 2 figures.

ASSOCIATION: Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii (Chelyabin Scientific Research Institute of Metallurgy)

SUBMITTED: 05Dec63 DATE ACQ: 09Jun64 ENCL: 00

SUB CODE: GC NO REF SOV: 003 OTHER: 001

Card 2/2

L 27304-65 EWT(m)/EWP(t)/EWP(b) IJP(c) JD/JG

ACCESSION NR: AP4047951 S/0020/64/158/005/1183/1185

15
19
17B

AUTHOR: Gorokh, A.V.; Kloketina, L.I.; Rispel', K.N.

TITLE: The behavior of molybdenite and the products of its dissociation during heating

SOURCE: AN SSSR. Doklady*, v. 158, no. 5, 1964, 1183-1185, and insert facing p. 1184

TOPIC TAGS: molybdenite, molybdenum refining, sintered molybdenite, molybdenum sulfide

77 B

ABSTRACT: Five samples of powdered Balkhash molybdenite concentrate were heated for 1 to 7 hrs. at 760C and 1-37 mm Hg and the oven temperature was gradually raised to [illegible]1200, 1450-1520, 1470-1550, 1540-1650, and 1500-1700C using alundum and molybdenum crucibles, in a study of the mechanism of molybdenite thermal dissociation. The sintered products, found to be in different stages of decomposition, were investigated microscopically, chemically and with the use of x-ray structural analysis. Thermal decomposition of molybdenite to Mo_2S_3, found to be complete in a reducing atmosphere at 760 mm and 1500C, was intensified by high-vacuum at lower temperatures. The Mo_2O_3 began to dissociate at temperatures in excess of 1500C at atmospheric pressure and at 1250-1300C at 1 mm Hg. The samples melted as the Mo:S ratio approached unity, and the

Card 1/2

L 27304-65

ACCESSION NR: AP4047951

formation of a metallic phase of dendritic or irregular form, the final product of dissociation was observed as the ratio reached a value of 4:3. In a high vacuum of 1×10^{-2} to 1×10^{-4} mm Hg, dissociation of Mo_2S_3 was also found to take place in the solid phase at 1100 - 1200C. Orig. art. has: 5 photomicrographs and 1 table.

ASSOCIATION: Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii (Chelyabinsk metallurgical scientific research institute)

SUBMITTED: 09May64 ENCL: 0 SUB CODE: IC, MM

NO REF SOV: 003 OTHER: 000

Card 2/2

GOROKH, A.V.

Methods for recalculating rock chemical analysis. Izv. AN SSSR. Ser.geol. 29 no.6:98-100 Je '64. (MIRA 18:2)

1. Nauchno-issledovatel'skiy institut metallurgii (NIIM), Chelyabinsk.

GOROKH, A.V.; GALEMIN, I.M.

Sooty carbon in blast furnace refractories. Ogneupory 29 no.9:394-399 '64. (MIRA 17:10)

1. Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii.

RYABCHIKOV, I.V.; KHRUSHCHEV, M.S.; MAKSIMOV, Yu.S.; GOROKH, A.V.; RUSAKOVA, A.G.

Conditions for the formation of silicon during the reduction of silica by carbon. Dokl. AN SSSR 158 no.2:427-428 S '64.

(MIRA 17:10)

1. Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii. Predstavleno akademikom S.I.Vol'fkovichem.

GOROKH, A.V.; KLOKOTINA, L.I.; RISPEL', K.N.

Behavior of molybdenite and its dissociation products on heating. Dokl. AN SSSR 158 no.5:1183-1185 O '64. (MIRA 17:10)

1. Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii. Predstavleno akademikom N.V.Belovym.

L 13029-66 EWP(e)/EWT(m)/EWP(t)/EWP(b) IJP(c) JD/WH
ACC NR: AP5028585 SOURCE CODE: UR/0076/65/039/011/2806/2808

AUTHOR: Novokhatskiy, I. A.; Belov, B. F.; Gorokh, A. V.; Savinskaya, A. A.

ORG: Chelyabinsk Metallurgical Scientific Research Institute (Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii)

TITLE: Phase diagram of ferrous oxide-corundum system

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 11, 1965, 2806-2808

TOPIC TAGS: iron compound, alumina, phase diagram, stoichiometric mixture, x ray diffraction analysis, sintering

ABSTRACT: The FeO-Al_2O_3 system was studied by means of x-ray diffraction and petrographic analysis. The specimens were prepared by sintering $FeAl_2O_4$ with Al_2O_3 in Al_2O_3 and ZrO_2 tubes at 1700°C in a purified argon atmosphere. After sintering the mixtures were quenched in water and subjected to x-ray powder analysis. It was shown in this system that $FeAl_2O_4$ and α-Al_2O_3 are not mutually soluble in solid phases. The study of the sintered stoichiometric $3FeO + Al_3O_3$ mixtures showed that $3FeO \cdot Al_2O_3$ compound is not formed. A new variation of the phase dia-

UDC: 541.123

Card 1/2

L 13029-66
ACC NR: AP5028585

gram of the $FeO-Al_2O_3$ system was constructed on the basis of the obtained experimental data and literature data (see fig. 1). Orig. art. has: 1 figure.

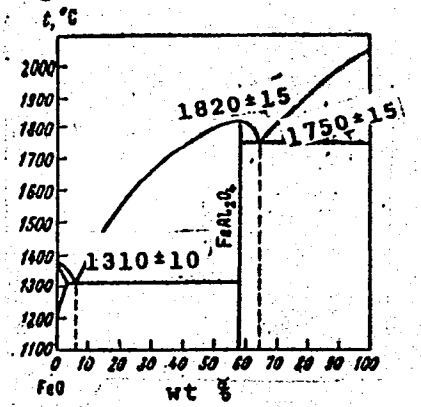


Fig. 1. Phase diagram of the $FeO-Al_2O_3$ system.

SUB CODE: 11, 20/ SUBM DATE: 06Aug64/ ORIG REF: 007/ OTH REF: 002

Card 2/2

NOVOKHATSKIY, I.A.; BELOV, B.F.; GOROKH, A.V.; SAVINSKAYA, A.A.

Phase equilibrium diagram of the FeO - Al_2O_3 system. Zhur.fiz.khim. 39 no.11:2806-2808 N '65. (MIRA 18:12)

1. Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii.

ACC NR: AP6019052 (A) SOURCE CODE: UR/0078/66/011/002/0427/0428

AUTHOR: Novokhatskiy, I. A.; Lanev, L. M.; Savinskaya, A. A.; Corokh, A. V.

ORG: none

TITLE: Diagram of phase equilibria in the system MnO-Al_2O_3 (corundum)

SOURCE: Zhurnal neorganicheskoy khimii, v. 11, no. 2, 1966, 427-428

TOPIC TAGS: phase diagram, phase equilibrium, phase analysis, manganese compound, aluminum compound, corundum, melting point

ABSTRACT: Specially synthesized high-purity MnO, α-Al_2O_3, and $MnAl_2O_4$ were used as initial components during a study of the phase equilibria in the system. The melting points of manganese aluminate and the eutectics between $MnAl_2O_4$ and α-Al_2O_3 (corundum) were measured with a [illegible] thermocouple and the temperature of the eutectic line between MnO and $MnAl_2O_4$ was measured by a PtRh(6)-PtRh(30) thermocouple. The $MnAl_2O_4$ melted congruently at 1850±15C without peritectic decomposition at 1560C. The temperature of the eutectic line between $MnAl_2O_4$ and α-Al_2O_3 was 1770±15C and between MnO and $MnAl_2O_4$ 1520±10C. The composition of the eutectics between $MnAl_2O_4$ and α-Al_2O_3, determined by the exposure-quenching method, was 27 wt% MnO and 73 wt% Al_2O_3, whereas the eutectics between MnO and $MnAl_2O_4$ had the following composition: 76 wt% MnO and 24 wt% Al_2O_3. The phase analysis of the sintering products of the mixture of $MnAl_2O_4$

Card 1/2 UDC: 541.123+546.712-31+546.623-31

ACC NR: AP6019052

and α-Al_2O_3 (1:1) carried out in a CO atmosphere for 3 hr. at 1700C revealed the absence of mutual solubility in the solid phases. The x-ray diffraction and optical characteristics of MnO and $MnAl_2O_4$ after sintering in a CO atmosphere at 1500C for 3 hr. remained the same as in the initial materials. This indicated the absence of noticeable mutual solubility also between these compounds. These data were used for plotting the phase equilibria diagram in the MnO-Al_2O_3 (corundum) system (see Fig. 1). The melting points of MnO and α-Al_2O_3 were 1785 and 2050C, respectively, during plotting of the diagram. The diagram was the simplest type of eutectic diagram and did not differ from that for the FeO-Al_2O_3 (corundum) system. Orig. art. has: 1 fig.

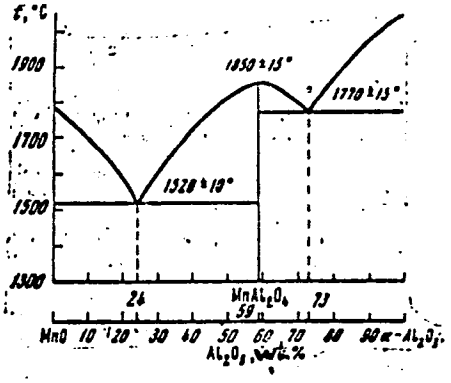


Fig. 1. Phase equilibria diagram of the system MnO-Al_2O_3 (corundum)

SUB CODE: 07/ SUBM DATE: 21Nov64/ ORIG REF: 006/ OTH REF: 004

Card 2/2

PERTSEL', V.M.; GOROKH, V.N.

Experience in using hydraulic columns. Sakh.prom. 34 no.1: 22-28 Ja '60. (MIRA 13:5)

1. 2-y Petrovskiy sakharorafinadnyy zavod (for Pertsel'). 2. TSentral'nyy nauchno-issledovatel'skiy institut sakharnoy promyshlennosti (for Gorokh).
(Petrovskoye (Kharkov Province)--Sugar manufacture)

KHONIG, P.[Honig, Pieter], red.; GOLOVNYAK, Yu.D., inzh.[translator]; MAKSIMOVA, N.A., inzh. [translator]; ZHIZHINA, R.G., inzh. [translator]; Prinimali uchastiye: TROYNO, V.P. [translator]; GOROKH, V.N.[translator]; BENIN, G.S., kand. tekhn. nauk, red.; VOYKOVA, A.A., red.; KISINA, Ye.I., tekhn. red.

[Principles of sugar technology]Printsipy tekhnologii sakhara. Pod red. G.S.Benina. Moskva, Pishchepromizdat, 1961. 615 p. Translated from the English. (MIRA 15:12)
(Sugar manufacture)

SUPONITS'KYY, M.Ya.; GOROKHOD, L.L.

[Hygiene in dairies of collective and state farms] Higiiena pratsi na molochnykh fermakh kolhospiv i radhospiv. Kyiv, Derzh. med. vyd-vo URSR, 1955. 111 p. (Biblioteka likaria, 30) (MLRA 10:2)
(DAIRYING--HYDIENIC ASPECTS)